

Message

From: Eisele, Adam [Eisele.Adam@epa.gov]
Sent: 10/9/2019 2:18:42 PM
To: Stovern, Michael [Stovern.Michael@epa.gov]
CC: Thoma, Eben [Thoma.Eben@epa.gov]; Beeler, Cindy [Beeler.Cindy@epa.gov]; Weitz, Melissa [Weitz.Melissa@epa.gov]
Subject: RE: Colorado Pneumatic Controller Study Paper - Peer Review
Attachments: CO PC Study_100919_ape_mw .docx

Hi Mike-

Here is another cut at comments on your manuscript. My OAP colleague Melissa (cc'd) added a few comments as well.

Some higher level thoughts are as follows:

- The measurement component of the study seems to be a minor piece, but it's not written up that way
- Be clear on the duration of the measurements (I think Luck et al. sat on pneumatics for 76 hrs) and actuations
- There is more equipment per well in this study population than in the national population, so that may warrant further clarity on representativeness
- I'd caution making direct comparisons of measurements to the OOOOa regulatory "limit", because you don't want the audience to think you're making a compliance determination
- The auto vs HSM CE comparison seems significant, but is not written up that way

Let us know if you have any questions.

Thanks for the opportunity to comment.

From: Stovern, Michael <Stovern.Michael@epa.gov>
Sent: Monday, October 07, 2019 11:14 AM
To: Eisele, Adam <Eisele.Adam@epa.gov>
Cc: Thoma, Eben <Thoma.Eben@epa.gov>; Beeler, Cindy <Beeler.Cindy@epa.gov>; Jeramy Murray <jeramy.murray@state.co.us>
Subject: RE: Colorado Pneumatic Controller Study Paper - Peer Review

Sounds great. Thanks!

Mike

From: Eisele, Adam <Eisele.Adam@epa.gov>
Sent: Monday, October 7, 2019 9:13 AM
To: Stovern, Michael <Stovern.Michael@epa.gov>
Cc: Thoma, Eben <Thoma.Eben@epa.gov>; Beeler, Cindy <Beeler.Cindy@epa.gov>; Jeramy Murray <jeramy.murray@state.co.us>
Subject: RE: Colorado Pneumatic Controller Study Paper - Peer Review

Thanks Mike-

Taking a look and plan to get back to you with comments by midweek. Does that work?

From: Stovern, Michael <Stovern.Michael@epa.gov>
Sent: Tuesday, October 01, 2019 2:43 PM
To: Eisele, Adam <Eisele.Adam@epa.gov>
Cc: Thoma, Eben <Thoma.Eben@epa.gov>; Beeler, Cindy <Beeler.Cindy@epa.gov>; Jeramy Murray

<jeramy.murray@state.co.us>

Subject: RE: Colorado Pneumatic Controller Study Paper - Peer Review

Hi Adam,

I have attached an updated version of the paper with your edits having been assimilated. I have also attached a draft of the supplemental information and database for your review if you want. I don't believe I sent you SI when you initially reviewed the paper.

Let me know if you have any additional edits. Thank you so much for your review!

Mike

From: Eisele, Adam <Eisele.Adam@epa.gov>

Sent: Wednesday, August 21, 2019 8:56 AM

To: Stovern, Michael <Stovern.Michael@epa.gov>

Subject: RE: Colorado Pneumatic Controller Study Paper - Peer Review

No worries. The be clear, the GHG Inventory and the GHG Reporting Program are two separate, but complimentary, efforts. GHG Reporting Program is a regulatory requirement for applicable facilities to report GHG emissions directly to EPA each year. GHG Inventory is a commitment the U.S. Govt made to the IPCC to report national emissions each year.

From: Stovern, Michael <Stovern.Michael@epa.gov>

Sent: Wednesday, August 21, 2019 10:41 AM

To: Eisele, Adam <Eisele.Adam@epa.gov>

Subject: RE: Colorado Pneumatic Controller Study Paper - Peer Review

Thanks Adam!

I'll assimilate all your comments into the paper and send you a revised version when I get back from inspections next week. Thanks for the new inventory numbers!

Thanks!

Mike

From: Eisele, Adam <Eisele.Adam@epa.gov>

Sent: Wednesday, August 21, 2019 8:27 AM

To: Stovern, Michael <Stovern.Michael@epa.gov>

Subject: RE: Colorado Pneumatic Controller Study Paper - Peer Review

Hey Mike-

It might be worth including a summary of the following GHGRP Reporting Year 2017 stats for your paper to put the study sample population into context. These numbers are reported by industry to EPA each year for facilities that are subject to GHG reporting (above 25,000 metric tons CO2 equiv).

The stats below only include the onshore production segment and do not include the gathering & boosting segment (no wells, but pneumatics), which will make the cleanest comparison. Also, GHGRP plans to release RY2018 data in the fall of this year so contemporaneous results with your study are not available yet. RY2017 results will put you more in line with the GHG Inventory referenced.

GHGRP subpart W data (as reported for RY2017)

Count of Producing Wells – Nationwide: 487458

Count of Producing Wells – Denver Basin: 19033

Count of Pneumatic Controllers – Nationwide (onshore production segment only): 813445

Count of Pneumatic Controllers – Denver Basin (onshore production segment only): 56324

GHGRP Pneumatic Controllers/well

Nationwide: 1.67

Denver Basin: 2.96

Stovern et al. Controllers/well (measured in 2018)

500 Pneumatic Controllers / 102 wells

= 4.9 Controllers/well

Let me know if you have any questions. I'm throwing a lot at you in terms of comments, but you'll notice similar comparisons in virtually all of the other peer reviewed O&G papers these days to put the particular study into context with EPA numbers.

From: Stovern, Michael <Stovern.Michael@epa.gov>

Sent: Monday, August 12, 2019 4:36 PM

To: Eisele, Adam <Eisele.Adam@epa.gov>; Dewees, Jason <Dewees.Jason@epa.gov>

Cc: Beeler, Cindy <Beeler.Cindy@epa.gov>; Thoma, Eben <Thoma.Eben@epa.gov>; Schwartz, Colin <Schwartz.Colin@epa.gov>; Jeremy Murray <jeramy.murray@state.co.us>; mark.mcmillan@state.co.us

Subject: Colorado Pneumatic Controller Study Paper - Peer Review

Hello Adam and Jason,

I'm sending you a copy of our new Colorado Pneumatic Controller Study paper for your peer review. Can you please review the paper, send me your comments and fill out the attached manuscript review form?

We will be submitting this for peer review in the Journal of Environmental Protection following your reviews, operator review and internal EPA ORD review.

Just a heads up that we want to send a copy of this paper to the operators who participated in the study for their review and comment concurrent to your review. Can you do a quick once over (by the end of the week?) to see if there are any "show stopper" issues before we send to the operators?

If either of you can't do the peer review but know of others that could let me know.

Thanks for your assistance!

Michael Stovern
Air and Toxics Enforcement
U.S. EPA, Region 8 (8ENF-AT)
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-6635 (office)

Stovern.Michael@epa.gov